BD-PC27E

TYPICAL SECTION @ ℄ BEARINGS USING DRAPED STRANDS

1¾"
4"
8" LAP (TYP.)

X SPACES @ 2" ± STRAND PATTERN

#4 DRAPED STRAND CONFINEMENT BARS @ 6" MAX. FOR A DISTANCE OF 1.5 x BEAM DEPTH

POSSIBLE LOCATION OF DRAPED STRANDS. DESIGNER TO INDICATE IF REQUIRED (10 MAX.)

NOTE:
MILD STEEL REINFORCEMENT NOT SHOWN FOR CLARITY.

X SPACES @ 2" ± STRAND PATTERN

Y SPACES @ 2" ± STRAND PATTERN

2¾"
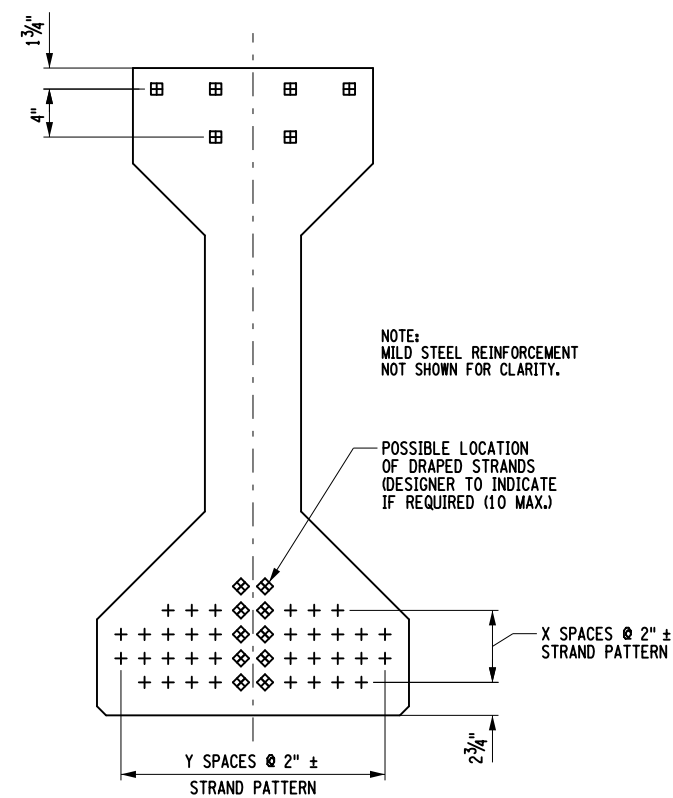
TYPICAL SECTION @ MIDSPAN USING DRAPED STRANDS

1¾"
4"

NOTE:
MILD STEEL REINFORCEMENT NOT SHOWN FOR CLARITY.

POSSIBLE LOCATION OF DRAPED STRANDS (DESIGNER TO INDICATE IF REQUIRED (10 MAX.)

X SPACES @ 2" ± STRAND PATTERN

Y SPACES @ 2" ± STRAND PATTERN

2¾"
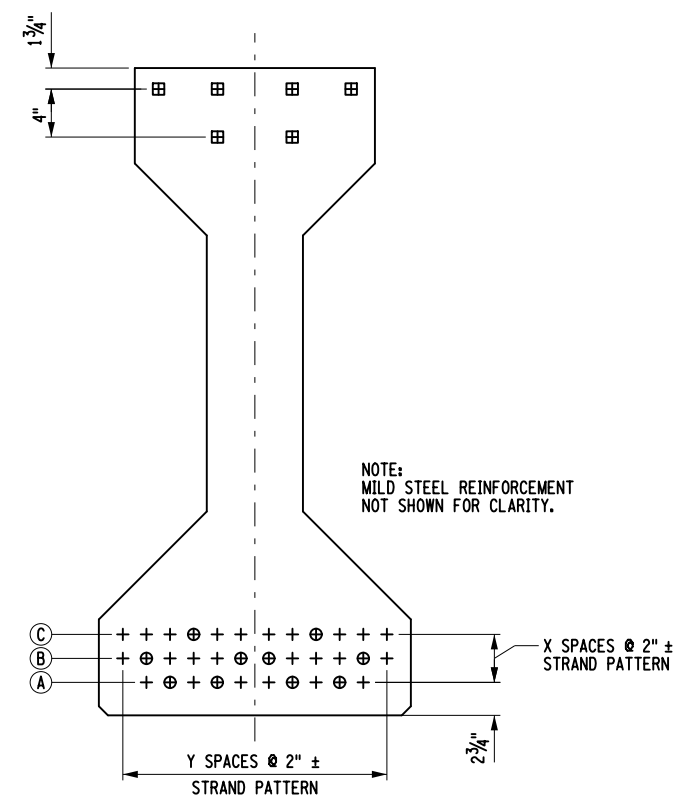
TYPICAL SECTION USING DEBONDED STRANDS

1¾"
4"

NOTE:
MILD STEEL REINFORCEMENT NOT SHOWN FOR CLARITY.

C
B
A

X SPACES @ 2" ± STRAND PATTERN

Y SPACES @ 2" ± STRAND PATTERN

2¾"
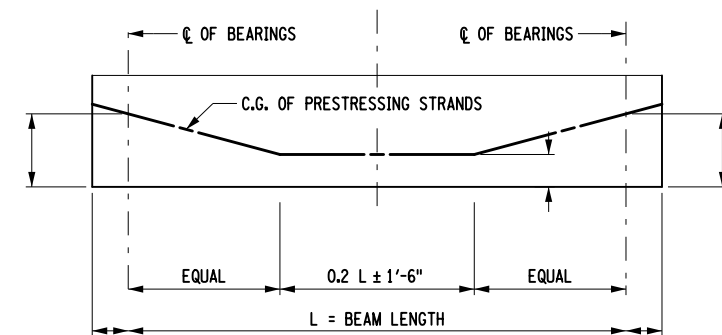
DRAPED TENDON PROFILE

℄ OF BEARINGS
℄ OF BEARINGS
C.G. OF PRESTRESSING STRANDS

EQUAL
0.2 L ± 1'-6"
EQUAL
L = BEAM LENGTH

+ – DENOTES STRAIGHT STRANDS
⊞ – DENOTES STRANDS TENSIONED TO 2.2 kips
◈ – DENOTES DRAPED STRANDS
⊕ – DENOTES DEBONDED STRANDS
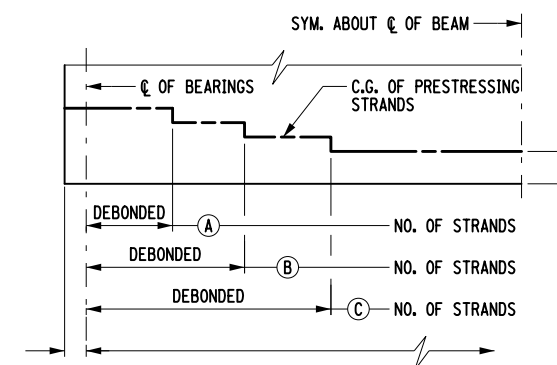
SCHEMATIC DETAIL FOR DEBONDED STRANDS

SYM. ABOUT ℄ OF BEAM
℄ OF BEARINGS
C.G. OF PRESTRESSING STRANDS

DEBONDED — A — NO. OF STRANDS
DEBONDED — B — NO. OF STRANDS
DEBONDED — C — NO. OF STRANDS

END ZONE REINFORCEMENT

#4 WEB STIRRUPS @ DESIGN SPACING (2 BARS PER SET) 2½" (MIN.)

2" COVER
4"
#4 WEB STIRRUP BARS @ 4" (2 BARS PER SET)
ONE DESIGN SPACING
#4 WEB STIRRUP BARS @ DESIGN SPACING (2 BARS PER SET) 2' MAX.

#4 TOP FLANGE REINFORCEMENT @ DESIGN SPACING (TYP.)

H (MIN.)

H

C.G. PRESTRESSING STRAND

#4 BOTTOM FLANGE REINFORCEMENT @ 6" SPACING MAX. (TYP.)

℄ BEARINGS

MOVE BARS WHICH MAY INTERFERE WITH DIAPHRAGM CONNECTION HOLES. IF BARS MUST BE CUT, ADD ONE AT 2½" SPACING.

NOTE:
COMPOSITE SHEAR BARS AND DRAPED STRAND CONFINEMENT BARS NOT SHOWN FOR CLARITY.

DESIGNER NOTES:

FOR CAMBER AND LOAD TABLES, SEE BD-PC29E.

FOR FILLED STAY-IN-PLACE FORM DETAILS, SEE BD-PC29E.

IN THE ZONE WHERE STIRRUPS ARE SPACED CLOSELY ATTACH THE TOP FLANGE HORIZONTAL BARS TO ALTERNATE STIRRUPS.

THE BAR LIST FOR EACH PRESTRESSED BEAM SHALL BE PLACED ON THAT BEAM SHEET. ALL BAR REINFORCEMENT EMBEDDED IN THE PRESTRESSED BEAMS SHALL BE INCLUDED IN THE PRESTRESSED BEAM ITEM.

ALL REINFORCEMENT TO BE VERIFIED BY DESIGNER.

WEB STIRRUPS AT THE ENDS SHALL MEET BURSTING REQUIREMENTS AS REQUIRED BY THE DESIGN SPECIFICATIONS. LARGER BAR SIZES MAY BE USED IF REQUIRED BY DESIGN.

JACKING FORCE SHALL BE ROUNDED TO THE NEAREST 0.1 kips AND THE SAME FOR ALL PRESTRESSED UNITS IN A BRIDGE.

CONSULT THE BRIDGE MANUAL FOR DEBONDING CRITERIA.

WHEN DRAPED STRANDS ARE USED THE TOTAL HOLD DOWN FORCE OF ALL DRAPED STRANDS FOR EACH BEAM SHALL NOT EXCEED 75% OF TOTAL BEAM WEIGHT.

THE STRANDS LABELED ⊞ SHALL BE TENSIONED TO 2.2 kips. THESE STRANDS OR ADDITIONAL STRANDS WITHIN THE TOP FLANGE MAY BE TENSIONED TO FULL PRETENSIONING IF REQUIRED BY DESIGN.

BEAM OVERHANG PAST ℄ BEARINGS = $\frac{\text{BEARING LENGTH}}{2}$ + 1" (MIN)